

# Invitation to Bid

**LSUHSC-SHREVEPORT**



BIDS WILL BE PUBLICLY OPENED:

**April 29, 2010**

**02:00 PM**

VENDOR NO. :  
SOLICITATION : **005489**  
OPENING DATE : **04/29/2010**

Return Bid in Envelope/Labels Provided to:

Purchasing Department  
PO Box 33932  
Shreveport LA 71130

BUYER : Morrison, Richard  
BUYER PHONE : 318/675-5292  
DATE ISSUED : 04/08/2010  
REQ. NO : 5969029  
FISCAL YEAR : 2010

Apheresis System

## INSTRUCTIONS TO BIDDERS

1. READ THE ENTIRE BID, INCLUDING ALL TERMS AND CONDITIONS AND SPECIFICATIONS.
2. FILL IN ALL BLANK SPACES.
3. ALL BID PRICES MUST BE TYPED OR WRITTEN IN INK. ANY CORRECTIONS, ERASURES OR OTHER FORMS OF ALTERATION TO UNIT PRICES SHOULD BE INITIALIZED BY THE BIDDER.
4. BID PRICES SHALL INCLUDE DELIVERY OF ALL ITEMS F.O.B. DESTINATION OR AS OTHERWISE PROVIDED. BIDS CONTAINING "PAYMENT IN ADVANCE" OR "C.O.D." REQUIREMENTS MAY BE REJECTED. PAYMENT IS TO BE MADE WITHIN 30 DAYS AFTER RECEIPT OF PROPERLY EXECUTED INVOICE OR DELIVERY, WHICHEVER IS LATER.
5. SPECIFY YOUR PAYMENT TERMS: \_\_\_\_\_ . CASH DISCOUNTS FOR LESS THAN 30 DAYS OR LESS THAN 1% WILL BE ACCEPTED, BUT WILL NOT BE CONSIDERED IN DETERMINING AWARDS

BY SIGNING THIS BID, THE BIDDER CERTIFIES:

- \* THAT NEITHER THIS BUSINESS ENTITY NOR ANY OF ITS EMPLOYEES OR SUBCONTRACTORS IS CURRENTLY LISTED AS EXCLUDED OR SANCTIONED BY EITHER THE DEPARTMENT OF HEALTH AND HUMAN SERVICES, OFFICE OF INSPECTOR GENERAL (OIG) OR THE GENERAL SERVICES ADMINISTRATION (GSA).
- \* THAT IF THIS BUSINESS ENTITY OR ANY OF ITS EMPLOYEES OR SUBCONTRACTORS APPEAR ON EITHER LISTING, MY BID WILL BE REJECTED.
- \* THAT IF AT ANY TIME DURING THE TERM OF THE CONTRACT AWARDED AS A RESULT OF THIS INVITATION TO BID, THIS ENTITY OR ANY OF ITS EMPLOYEES OR SUBCONTRACTORS APPEARS ON EITHER LISTING, MY COMPANY WILL NOTIFY THE CONTRACTING AGENCY, AND THE CONTRACT WILL BE TERMINATED. THE CONTRACTING AGENCY WILL NOT BE LIABLE FOR ANY DAMAGES RESULTING FROM SAID TERMINATION.

THE BIDDER FURTHER CERTIFIES:

- \* COMPLIANCE WITH ALL INSTRUCTIONS TO BIDDERS, TERMS, CONDITIONS, AND SPECIFICATIONS.
- \* THIS BID IS MADE WITHOUT COLLUSION OR FRAUD.
- \* THAT ALL TAXES DULY ASSESSED BY THE STATE OF LOUISIANA AND IT'S SUBDIVISIONS, INCLUDING FRANCHISE TAXES, PRIVILEGE TAXES, SALES TAXES AND ALL OTHER TAXES FOR WHICH THE FIRM IS LIABLE HAVE BEEN PAID.
- \* THAT IF MY BID IS ACCEPTED WITHIN \_\_\_\_\_ DAYS FROM BID CLOSING TIME, MY FIRM WILL FURNISH ANY OR ALL OF THE ITEMS (OR SECTIONS) AT THE PRICE OPPOSITE EACH ITEM (OR SECTION).
- \* DELIVERY WILL BE MADE WITHIN \_\_\_\_\_ DAYS AFTER RECEIPT OF ORDER.

VENDOR PHONE NUMBER:

TITLE

DATE

FAX NUMBER:

SIGNATURE OF AUTHORIZED BIDDER

NAME OF BIDDER

(MUST BE SIGNED)

(TYPED OR PRINTED)

# Invitation to Bid

STANDARD TERMS & CONDITIONS	Page 2 of 6
NUMBER : 005489 OPEN DATE : 04/29/2010 TIME: 02:00 PM	BIDDER:
<p>6. DESIRED DELIVERY: 10 DAYS ARO, UNLESS SPECIFIED ELSEWHERE</p> <p>7. TO ASSURE CONSIDERATION, ALL BIDS SHOULD BE SUBMITTED IN THE SPECIAL ENVELOPE, OR USE BID LABEL IF FURNISHED FOR THAT PURPOSE. IN THE EVENT YOUR BID CONTAINS BULKY SUBJECT MATERIAL, THE SPECIAL BID ENVELOPE SHOULD BE FIRMLY AFFIXED TO THE MAILING ENVELOPE.</p> <p>8. BIDS SUBMITTED ARE SUBJECT TO PROVISIONS OF THE LAWS OF THE STATE OF LOUISIANA INCLUDING BUT NOT LIMITED TO L.R.S. 39:1551-1736; PURCHASING RULES AND REGULATIONS; EXECUTIVE ORDERS; STANDARD TERMS AND CONDITIONS; SPECIAL CONDITIONS; AND SPECIFICATIONS LISTED IN THIS SOLICITATION.</p> <p>9. IMPORTANT: THIS BID IS TO BE MANUALLY SIGNED IN INK BY A PERSON AUTHORIZED TO BIND THE VENDOR (SEE NO.31).</p> <p>10. INQUIRIES: ADDRESS ALL INQUIRIES AND CORRESPONDENCE TO THE BUYER AT THE PHONE NUMBER AND ADDRESS SHOWN ABOVE.</p> <p>11. BID FORMS: ALL WRITTEN BIDS, UNLESS OTHERWISE PROVIDED FOR, SHOULD BE SUBMITTED ON, AND IN ACCORDANCE WITH FORMS PROVIDED, PROPERLY SIGNED (SEE #31). BIDS MUST BE RECEIVED AT THE ADDRESS SPECIFIED IN THE SOLICITATION PRIOR TO BID OPENING TIME IN ORDER TO BE CONSIDERED.</p> <p>12. STANDARDS OR QUALITY. ANY PRODUCT OR SERVICE BID SHALL CONFORM TO ALL APPLICABLE FEDERAL AND STATE LAWS AND REGULATIONS AND THE SPECIFICATIONS CONTAINED IN THE SOLICITATION. UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION, ANY MANUFACTURER'S NAME, TRADE NAME, BRAND NAME, OR CATALOG NUMBER USED IN THE SPECIFICATION IS FOR THE PURPOSE OF DESCRIBING THE STANDARD OF QUALITY, PERFORMANCE, AND CHARACTERISTICS DESIRED AND IS NOT INTENDED TO LIMIT OR RESTRICT COMPETITION. BIDDER MUST SPECIFY THE BRAND AND MODEL NUMBER OF THE PRODUCT OFFERED IN HIS/HER BID. BIDS NOT SPECIFYING BRAND AND MODEL NUMBER SHALL BE CONSIDERED AS OFFERING THE EXACT PRODUCTS SPECIFIED IN THE SOLICITATION.</p> <p>13. DESCRIPTIVE INFORMATION. BIDDERS PROPOSING AN EQUIVALENT BRAND OR MODEL SHOULD SUBMIT WITH THE BID, INFORMATION (SUCH AS ILLUSTRATIONS, DESCRIPTIVE LITERATURE, TECHNICAL DATA) SUFFICIENT FOR LSUHSC TO EVALUATE QUALITY, SUITABILITY, AND COMPLIANCE WITH THE SPECIFICATIONS IN THE SOLICITATION. FAILURE TO SUBMIT DESCRIPTIVE INFORMATION MAY CAUSE BID TO BE REJECTED. ANY CHANGE MADE TO A MANUFACTURER'S PUBLISHED SPECIFICATION SUBMITTED FOR A PRODUCT SHALL BE VERIFIABLE BY THE MANUFACTURER. IF ITEM(S) BID DO NOT FULLY COMPLY WITH SPECIFICATIONS (INCLUDING BRAND AND/OR PRODUCT NUMBER), BIDDER MUST STATE IN WHAT RESPECT ITEMS(S) DEVIATE. FAILURE TO NOTE EXCEPTIONS ON THE BID FORM WILL NOT RELIEVE THE SUCCESSFUL BIDDER(S) FROM SUPPLYING THE ACTUAL PRODUCTS REQUESTED.</p> <p>14. BID OPENING. BIDDERS MAY ATTEND THE BID OPENING, BUT NO INFORMATION OR OPINIONS CONCERNING THE ULTIMATE CONTRACT AWARD WILL BE GIVEN AT THE BID OPENING OR DURING THE EVALUATION PROCESS. BIDS MAY BE EXAMINED WITHIN 72 HOURS AFTER BID OPENING. INFORMATION PERTAINING TO COMPLETED FILES MAY BE SECURED BY VISITING LSUHSC DURING NORMAL WORKING HOURS. WRITTEN BID TABULATIONS WILL NOT BE FURNISHED.</p> <p>15. AWARDS. AWARD WILL BE MADE TO THE LOWEST RESPONSIBLE AND RESPONSIVE BIDDER. LSUHSC RESERVES THE RIGHT TO AWARD ITEMS SEPARATELY, GROUP, OR IN TOTAL, AND TO REJECT ANY OR ALL BIDS AND WAIVE ANY INFORMALITIES.</p> <p>16. PRICES. UNLESS OTHERWISE SPECIFIED BY LSUHSC IN THE SOLICITATION, BID PRICES MUST BE COMPLETE, INCLUDING TRANSPORTATION PREPAID BY BIDDER TO DESTINATION AND FIRM FOR ACCEPTANCE FOR A MINIMUM OF 30 DAYS. IF ACCEPTED, PRICES MUST BE FIRM FOR THE CONTRACTUAL PERIOD. BIDS OTHER THAN F.O.B. DESTINATION MAY BE REJECTED. PRICES SHOULD BE QUOTED IN THE UNIT (EACH,</p>	

# Invitation to Bid

<b>STANDARD TERMS &amp; CONDITIONS</b>	Page 3 of 6
<b>NUMBER : 005489</b> <b>OPEN DATE : 04/29/2010      TIME: 02:00 PM</b>	<b>BIDDER:</b>
<p>BOX, CASE, ETC.) AS SPECIFIED IN THE SOLICITATION.</p> <p>17.DELIVERIES. BIDS MAY BE REJECTED IF THE DELIVERY TIME INDICATED IS LONGER THAN THAT SPECIFIED IN THE SOLICITATION.</p> <p>18.TAXES. VENDOR IS RESPONSIBLE FOR INCLUDING ALL APPLICABLE TAXES IN THE BID PRICE. LSUHSC AGENCIES ARE EXEMPT FROM ALL STATE AND LOCAL SALES AND USE TAXES.</p> <p>19.NEW PRODUCTS. UNLESS SPECIFICALLY CALLED FOR IN THE SOLICITATION, ALL PRODUCTS FOR PURCHASE MUST BE NEW, NEVER PREVIOUSLY USED, AND THE CURRENT MODEL AND/OR PACKAGING. NO REMANUFACTURED, DEMONSTRATOR, USED OR IRREGULAR PRODUCT WILL BE CONSIDERED FOR PURCHASE UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION. THE MANUFACTURER'S STANDARD WARRANTY WILL APPLY UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION.</p> <p>20.CONTRACT CANCELLATION. THE STATE OF LOUISIANA HAS THE RIGHT TO CANCEL ANY CONTRACT, IN ACCORDANCE WITH PURCHASING RULES AND REGULATIONS, FOR CAUSE INCLUDING BUT NOT LIMITED TO THE FOLLOWING: (1) FAILURE TO DELIVER WITHIN THE TIME SPECIFIED IN THE CONTRACT; (2) FAILURE OF THE PRODUCT OR SERVICE TO MEET SPECIFICATIONS, CONFORM TO SAMPLE QUALITY OR TO BE DELIVERED IN GOOD CONDITION; (3) MISREPRESENTATION BY THE CONTRACTOR; (4) FRAUD, COLLUSION CONSPIRACY OR OTHER UNLAWFUL MEANS OF OBTAINING ANY CONTRACT WITH THE STATE; (5) CONFLICT OF CONTRACT PROVISIONS WITH CONSTITUTIONAL OR STATUTORY PROVISIONS OF STATE OR FEDERAL LAW; (6) ANY OTHER BREACH OF CONTRACT.</p> <p>21.DEFAULT OF CONTRACT. FAILURE TO DELIVER WITHIN THE TIME SPECIFIED IN THE BID WILL CONSTITUTE A DEFAULT AND MAY CAUSE CANCELLATION OF THE CONTRACT. WHERE THE UNIVERSITY HAS DETERMINED THE CONTRACTOR TO BE IN DEFAULT, THE UNIVERSITY RESERVES THE RIGHT TO PURCHASE AN OR ALL PRODUCTS OR SERVICES COVERED BY THE CONTRACT ON THE OPEN MARKET AND TO CHARGE THE CONTRACTOR WITH COST IN EXCESS OF THE CONTRACT PRICE. UNTIL SUCH ASSESSED CHARGES HAVE BEEN PAID, NO SUBSEQUENT BID FROM THE DEFAULTING CONTRACTOR WILL BE CONSIDERED.</p> <p>22.ORDER OF PRIORITY. IN THE EVENT THERE IS A CONFLICT BETWEEN THE INSTRUCTIONS TO BIDDERS OR STANDARD CONDITIONS AND THE SPEICAL CONDITIONS, THE SPECIAL CONDITIONS SHALL GOVERN.</p> <p>23.APPLICABLE LAW. ALL CONTRACTS SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF LOUISIANA.</p> <p>24.EQUAL OPPORTUNITY. BY SUBMITTING AND SIGNING THIS BID, BIDDER AGREES THAT HE/SHE WILL NOT DISCRIMINATE IN THE RENDERING OF SERVICES TO AND/OR EMPLOYMENT OF INDIVIDUALS BECAUSE OF RACE, COLOR, RELIGION, SEX, AGE, NATIONAL ORIGIN, HANDICAP, DISABILITY, VETERAN STATUS, OR A OTHER NON-MERIT FACTOR.</p> <p>25.SPECIAL ACCOMMODATIONS. ANY "QUALIFIED INDIVIDUAL WITH DISABILITY" AS DEFINED BY THE AMERICANS WITH DISABILITIES ACT WHO HAS SUBMITTED A BID AND DESIRES TO ATTEND THE BID OPENING, MUST NOTIFY THIS OFFICE IN WRITING NOT LATER THAN SEVEN DAYS PRIOR TO THE BID OPENING DATE OF THEIR NEED FOR SPECIAL ACCOMMODATIONS. IF THE REQUEST CANNOT BE REASONABLY PROVIDED, THE INDIVIDUAL WILL BE INFORMED PRIOR TO THE BID OPENING.</p> <p>26.IDEMNITY. CONTRACTOR AGREES, UPON RECEIPT OF WRITTEN NOTICE OF A CLAIM OR ACTION, TO DEFEND THE CLAIM OR ACTION, OR TAKE OTHER APPROPRIATE MEASURE, TO IDEMNIFY, AND HOLD HARMLESS, LSUHSC, ITS OFFICERS, ITS AGENTS AND ITS EMPLOYEES FROM AND AGAINST ALL CLAIMS AND ACTIONS FOR BODILY INJURY, DEATH OR PROPERTY DAMAGES CAUSED BY THE FAULT OF THE CONTRACTOR,</p>	

# Invitation to Bid

<b>STANDARD TERMS &amp; CONDITIONS</b>	Page 4 of 6
<b>NUMBER : 005489</b> <b>OPEN DATE : 04/29/2010</b> <b>TIME: 02:00 PM</b>	<b>BIDDER:</b>
<p>             OFFICERS, ITS AGENTS, OR ITS EMPLOYEES. CONTRACTOR IS OBLIGATED TO INDEMNIFY ONLY TO THE EXTENT OF THE FAULT OF THE CONTRACTOR, ITS OFFICERS, ITS AGENTS, OR ITS EMPLOYEES. HOWEVER, THE CONTRACTOR SHALL HAVE NO OBLIGATION AS SET FORTH ABOVE WITH RESPECT TO ANY CLAIM OR ACTION FROM BODILY INJURY, DEATH OR PROPERTY DAMAGES ARISING OUT OF THE FAULT OF THE UNIVERSITY, ITS OFFICERS, ITS AGENTS OR ITS EMPLOYEES.           </p> <p>             27. INTERPRETATION OF DOCUMENT: ANY INTERPRETATION OF THE BID OR QUOTATION DOCUMENT WILL ONLY BE MADE BY AN ADDENDUM ISSUED IN WRITING BY THE PURCHASING DEPARTMENT. SUCH ADDENDUM WILL BE MAILED OR DELIVERED TO EACH PERSON RECEIVING A SET OF THE ORIGINAL BID OR QUOTATION DOCUMENTS. LSUHSC WILL NOT BE RESPONSIBLE FOR ANY OTHER EXPLANATION OR INTERPRETATION OF THE DOCUMENTS.           </p> <p>             28. ACCEPTANCE OF BID: ONLY THE ISSUANCE OF A PURCHASE ORDER OR A SIGNED CONTRACT CONSTITUTES ACCEPTANCE ON THE PART OF LSUHSC.           </p> <p>             29. ADHERENCE TO JCAHO STANDARDS: WHERE APPLICABLE, LSUHSC IS ACCREDITED BY THE JOINT COMMISSION ON ACCREDITATION OF HEALTHCARE ORGANIZATIONS AND AS SUCH ALL CONTRACTORS, SUBCONTRACTORS, AND VENDORS AGREE TO ADHERE TO THE APPLICABLE STANDARDS PROMULGATED BY THE COMMISSION.           </p> <p>             30. PREFERENCE: IN ACCORDANCE WITH LOUISIANA REVISED STATUTES 39:1595, A PREFERENCE MAY BE ALLOWED FOR PRODUCTS MANUFACTURED, PRODUCED, GROWN, OR ASSEMBLED IN LOUISIANA OF EQUAL QUALITY. DO YOU CLAIM THIS PREFERENCE?    YES _____ NO _____              SPECIFY THE LINE NUMBER (S) _____              SPECIFY LOCATION WITHIN LOUISIANA WHERE THIS PRODUCT IS MANUFACTURED, PRODUCED, GROWN OR ASSEMBLED _____              (NOTE: IF MORE SPACE IS REQUIRED, INCLUDE ON SEPARATE SHEET.)              DO YOU HAVE A LOUISIANA BUSINESS WORK FORCE?    YES _____ NO _____              IF SO, DO YOU CERTIFY THAT AT LEAST FIFTY PERCENT (50%) OF YOUR LOUISIANA WORKFORCE IS COMPRISED OF LOUISIANA RESIDENTS?              YES _____ NO _____              FAILURE TO SPECIFY ABOVE INFORMATION MAY CAUSE ELIMINATION FROM PREFERENCES.              PREFERENCES SHALL NOT APPLY TO SERVICE CONTRACTS.           </p> <p>             31. SIGNATURE AUTHORITY. IN ACCORDANCE WITH L.R.S. 39:1594 (ACT 121), THE PERSON SIGNING THE BID MUST BE:           </p> <p>             31.1. A CURRENT CORPORATE OFFICER, PARTNERSHIP MEMBER OR OTHER INDIVIDUAL SPECIFICALLY AUTHORIZED TO SUBMIT A BID AS REFLECTED IN THE APPROPRIATE RECORDS ON FILE WITH THE SECRETARY OF STATE; OR           </p> <p>             31.2. AN INDIVIDUAL AUTHORIZED TO BIND THE VENDOR AS REFLECTED BY AN ACCOMPANYING CORPORATE RESOLUTION, CERTIFICATE OR AFFIDAVIT; OR           </p> <p>             31.3. AN INDIVIDUAL LISTED ON THE STATE OF LOUISIANA BIDDER'S APPLICATION AS AUTHORIZED TO EXECUTE BIDS. BY SIGNING THE BID, THE BIDDER CERTIFIES COMPLIANCE WITH THE ABOVE.           </p>	

# Invitation to Bid

SPECIAL TERMS & CONDITIONS	Page 5 of 6
NUMBER : 005489 OPEN DATE : 04/29/2010      TIME: 02:00 PM	BIDDER:
<p>32. Street address for bids returned via carriers like FedEx, UPS, etc.: LSU Health Sciences Center - Shreveport Attn: Purchasing (also put solicitation # here) 3010 Linwood Ave. Shreveport, LA 71130</p> <p>Mailing Address: LSU Health Sciences Center - Shreveport Attn: Purchasing (also put solicitation # here) P.O. Box 33932 Shreveport, LA 71130</p> <p>Hand-Delivered Sealed Bids are brought to: LSU Health Sciences Center - Shreveport Purchasing Department Room 203 1427 Kings Hwy Shreveport, LA</p> <p>33. LSUHSC-S POC is Mark Randolph, Hospital Administration @ (318) 675-5061.</p> <p>34. Bid shall be opened and the prices read aloud at 2:00 PM, on 04/29/2010. ALL BIDS BECOME A MATTER OF PUBLIC RECORD AT THAT TIME. BY SUBMITTING A BID, BIDDER SPECIFICALLY ASSUMES ANY AND ALL RISKS AND LIABILITY ASSOCIATED WITH INFORMATION MARKED CONFIDENTIAL IN THE BID AND THE RELEASE OF THE INFORMATION.</p> <p>35. Products purchased, as a result of this Invitation To Bid, must be delivered &amp; invoiced no later than the close of the State of Louisiana fiscal year, which is June 30, 2010.</p>	

# Invitation to Bid

<b>PRICE SHEET</b>		Page 6 of 6			
<b>NUMBER</b> : 005489 <b>OPEN DATE</b> : 04/29/2010 <b>TIME</b> : 02:00 PM		<b>BIDDER:</b>			
<b>UNLESS SPECIFIED ELSEWHERE SHIP TO:</b>  1541 Kings Highway Shreveport LA 71130					
Line No.	Description			Unit Price	Extended Amount
1	Apheresis System. See Attachment A for specifications.  Specify brand, model bid(if applicable) <hr style="width: 30%; margin-top: 10px;"/>	1.00	EA		

**LSUHSC SHREVEPORT**  
**Technical Specification**  
**For**  
**Therapeutic Plasma Exchange System**  
**(Apheresis System)**

Notice of Intent: Louisiana State University Health Sciences Center (LSUHSC-S) intends to acquire an automated apheresis machine capable of performing therapeutic plasma exchange. The system must have an upgradeable platform since it is the medical center's intention to transition the system into the Bone Marrow Transplant Laboratory.

- 1.0 Scope: The successful vendor will supply an apheresis system that meets the technical specifications listed in this document. The vendor must also comply with requirements for training, installation and service.
- 2.0 Submittals: Each bidder shall include with the proposal, brochures, art sheets or other technical information that addresses how the system being bid meets these specifications.
- 3.0 Technical Specifications:
  - 3.1 Procedure requirements – System is to perform therapeutic plasma exchange and meet the following clinical performance requirements:
    - 3.1.1 Plasma removal efficiency – average value of no less than 83%
    - 3.1.2 Blood volume exchange – removal of 1 plasma volume must not exceed 1.15 total blood volume removal
    - 3.1.3 Anticoagulant – system must not deliver more than 15ml of anticoagulant per liter of whole blood processed
    - 3.1.4 Blood volume within the tubing set must not exceed 200ml.
  - 3.2 Setup Time – The system must be easy to setup and require minimal time to avoid delays in patient care.
    - 3.2.1 Loading times for system is to not exceed 4 minutes
    - 3.2.2 Priming time for system is not to exceed 12 minutes
  - 3.3 Power – the system must be easily portable and require no special power outlet.
    - 3.3.1 Voltage – 110 to 120VAC
    - 3.3.2 Amperage – current draw must not exceed 15 amps
  - 3.4 Centrifuge
    - 3.4.1 Maximum centrifuge speed to be no more than 3000 rpm
    - 3.4.2 Maximum g-force must not exceed 1250g

### 3.5 Pump Ranges/Flow

- 3.5.1 Inlet pump – maximum no less than 140ml/min
- 3.5.2 AC pump – maximum no less than 12ml/min
- 3.5.3 Replace pump – In bolus mode the pump must have a user definable range with the minimum to be no greater than 10ml/min and the maximum to be no less than 120ml/min
- 3.5.4 Return pump
  - 3.5.4.1 Run mode – maximum flow no less than 280ml/min
  - 3.5.4.2 Rinse back mode – user definable range with maximum no less than 100ml/min

### 3.6 Pump Ranges, Volume

- 3.6.1 Accuracy – Pump volume accuracy must be within  $\pm 8\%$  of displayed value
- 3.6.2 Remove pump – Plasma volumes exchanged must be a minimum capability of no less than 4.0 of a patient's plasma volume.
- 3.6.3 Replace pump – Plasma volume exchanged range must be equivalent to that of the remove pump.

### 3.7 System Sensors

- 3.7.1 Anticoagulant fluid detector must respond in less than 2 seconds after fluid is absent.
- 3.7.2 Replacement fluid detector must respond in less than 2 seconds.

### 3.8 Pressure Sensor - Centrifuge system must be equipped with a pressure sensor

- 3.8.1 Sensor accuracy – No greater than  $\pm 10\%$
- 3.8.2 The sensor must operate in a range of (no less than) 400 to 2000 mmHg

### 3.9 Fluid Leak Detector – System must be capable of detecting a leak in the centrifuge with a sensitivity of 0.5ml or less.

### 3.10 Line Sensors

- 3.10.1 System must have pressure sensors on the inlet and return lines
- 3.10.2 Sensor operating range must be at least -250mmHg to 450mmHg
- 3.10.3 Default alarm points – System must have built in alarm points
  - 3.10.3.1 Inlet sensor must alarm at no less than -250mmHg with an accuracy of no less than  $\pm 20$ mmHg
  - 3.10.3.2 Return sensor must alarm at no greater than 400mmHg with an accuracy of no less than  $\pm 20$ mmHg



- 3.11 Red Cell Detector – System must automatically divert spillover from the collection bag at a level of no less than 1.5% hematocrit
- 3.12 Reservoir Sensors – System must be equipped with reservoir sensors and meet the following alarm requirements.
- 3.12.1 High level/low level – when stroke volume between sensors is equivalent to 45ml to 65ml (maximum range)
- 3.12.2 Alarm response – System must stop pumps when low level alarms and before air enters line
- 3.13 User Interface – System must use a touch screen interface with visual and audible alarms. User must be able to set all operational parameters on this screen.
- 3.14 Safety Features
- 3.14.1 Alarm types – System must provide audio, and flashing visual alarms with alarm description on screen
- 3.14.2 Alarm mute – User must be able to silence audible alarm but visual alarms must continue until alarm condition is resolved
- 3.14.3 Alarms – The following are the minimum required alarms:
- AC infusion to patient – limit specified by user
  - Delay time
  - AC pump over speed (pump must stop within 3 revolutions of alarm actuation)
  - AC directly to patient
  - AC ratio too low – operator must specify value
  - AC ratio too high – operator must specify value
- 3.15 Tubing Sets – Exchange sets are to be single patient use and meet the following requirements:
- 3.15.1 Blood volume < 200ml
- 3.15.2 Remove blood volume – no less than 4L
- 3.15.3 Reservoir volume - >50ml
- 3.15.4 Red blood cell residual volume – no greater than 10ml
- 3.15.5 Return filter – particle removal of 200 microns
- 3.16 Installation

- 3.16.1 Installation, field assembly, interconnection, equipment calibration check-out and certifications shall be by factory trained personnel
- 3.16.2 Successful vendor must provide a complete installation schedule identifying the date of equipment delivery and install and the planned completion date not to exceed 28 working days after delivery.
- 3.16.3 One set of Owner's and Operator's manuals (in English) shall be provided and one set of installation manuals/plans (in English).
- 3.16.4 All service documentation will be provided to include service manuals, troubleshooting guides, schematics, and system block diagrams on all equipment under the bid. This includes equipment not manufactured by the successful bidder.

3.17 Service Support

Service shall be readily available to LSUHSC-S. Bidder guarantees that service response shall occur in less than 1.0 hour by phone and less than 24 hours on-site during normal business hours (8-5 M-F).

3.18 Application Support

3.18.1 Applications training for all components of the bid shall be included as part of the bid.

3.18.2 Vendor to specify exact training provided, and as minimum must meet the criteria as follows:

- Must be provided on-site by qualified personnel with specific training on the specific version of the equipment installed.
- Must be provided for a period of at least three (3) days at turnover of equipment.

3.18.3 Actual support shall be available through a 1-800 (toll free to user) support system at least 5 days a week.

3.18.4 Actual dates and hours of training shall be agreed upon by LSUHSC-S.

(The intent of this statement is to give the owner/user department input to the dates and time of training in order to co-ordinate training with on-going staffing issues and patient care demands at LSUHSC-S)

3.19 System Warranty

Entire system shall be warranted for a period of one year. Warranty service shall be provided during normal working hours, 8:00 A.M. to 5:00 P.M., Monday through Friday. Entire system means the system in its entirety. All labor and components are to be included. This requirement pertains to all components included in this bid. During the warranty period, vendor shall provide LSUHSC-

S with all software upgrades that do not require hardware changes, at no charge. This requirement pertains to the complete system and all components included in this bid.

Preventative Maintenance Inspections (PMIs) are to be included at no charge to LSUSHC-S. Each PMI is to include all equipment. Preventative Maintenance Inspections are to be scheduled with LSUSHC-S during the normal working hours of the vendor to prevent additional after hour charges.

**LSUHSC SHREVEPORT**  
**Technical Specification**  
**For**  
**Therapeutic Plasma Exchange System**  
**(Apheresis System)**

Notice of Intent: Louisiana State University Health Sciences Center (LSUHSC-S) intends to acquire an automated apheresis machine capable of performing therapeutic plasma exchange. The system must have an upgradeable platform since it is the medical center's intention to transition the system into the Bone Marrow Transplant Laboratory.

- 1.0 Scope: The successful vendor will supply an apheresis system that meets the technical specifications listed in this document. The vendor must also comply with requirements for training, installation and service.
- 2.0 Submittals: Each bidder shall include with the proposal, brochures, art sheets or other technical information that addresses how the system being bid meets these specifications.
- 3.0 Technical Specifications:
  - 3.1 Procedure requirements – System is to perform therapeutic plasma exchange and meet the following clinical performance requirements:
    - 3.1.1 Plasma removal efficiency – average value of no less than 83%
    - 3.1.2 Blood volume exchange – removal of 1 plasma volume must not exceed 1.15 total blood volume removal
    - 3.1.3 Anticoagulant – system must not deliver more than 15ml of anticoagulant per liter of whole blood processed
    - 3.1.4 Blood volume within the tubing set must not exceed 200ml.
  - 3.2 Setup Time – The system must be easy to setup and require minimal time to avoid delays in patient care.
    - 3.2.1 Loading times for system is to not exceed 4 minutes
    - 3.2.2 Priming time for system is to not exceed 12 minutes
  - 3.3 Power – the system must be easily portable and require no special power outlet.
    - 3.3.1 Voltage – 110 to 120VAC
    - 3.3.2 Amperage – current draw must not exceed 15 amps
  - 3.4 Centrifuge
    - 3.4.1 Maximum centrifuge speed to be no more than 3000 rpm
    - 3.4.2 Maximum g-force must not exceed 1250g

### 3.5 Pump Ranges/Flow

- 3.5.1 Inlet pump – maximum no less than 140ml/min
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### 3.7 System Sensors

- 3.7.1 Anticoagulant fluid detector must respond in less than 2 seconds after fluid is absent.
- 3.7.2 Replacement fluid detector must respond in less than 2 seconds.

### 3.8 Pressure Sensor - Centrifuge system must be equipped with a pressure sensor

- 3.8.1 Sensor accuracy – No greater than  $\pm 10\%$
- 3.8.2 The sensor must operate in a range of (no less than) 400 to 2000 mmHg

### 3.9 Fluid Leak Detector – System must be capable of detecting a leak in the centrifuge with a sensitivity of 0.5ml or less.

### 3.10 Line Sensors

- 3.10.1 System must have pressure sensors on the inlet and return lines
- 3.10.2 Sensor operating range must be at least -250mmHg to 450mmHg
- 3.10.3 Default alarm points – System must have built in alarm points
  - 3.10.3.1 Inlet sensor must alarm at no less than -250mmHg with an accuracy of no less than  $\pm 20$ mmHg
  - 3.10.3.2 Return sensor must alarm at no greater than 400mmHg with an accuracy of no less than  $\pm 20$ mmHg

- 3.11 Red Cell Detector – System must automatically divert spillover from the collection bag at a level of no less than 1.5% hematocrit
- 3.12 Reservoir Sensors – System must be equipped with reservoir sensors and meet the following alarm requirements.
- 3.12.1 High level/low level – when stroke volume between sensors is equivalent to 45ml to 65ml (maximum range)
- 3.12.2 Alarm response – System must stop pumps when low level alarms and before air enters line
- 3.13 User Interface – System must use a touch screen interface with visual and audible alarms. User must be able to set all operational parameters on this screen.
- 3.14 Safety Features
- 3.14.1 Alarm types – System must provide audio, and flashing visual alarms with alarm description on screen
- 3.14.2 Alarm mute – User must be able to silence audible alarm but visual alarms must continue until alarm condition is resolved
- 3.14.3 Alarms – The following are the minimum required alarms:
- AC infusion to patient – limit specified by user
  - Delay time
  - AC pump over speed (pump must stop within 3 revolutions of alarm actuation)
  - AC directly to patient
  - AC ratio too low – operator must specify value
  - AC ratio too high – operator must specify value
- 3.15 Tubing Sets – Exchange sets are to be single patient use and meet the following requirements:
- 3.15.1 Blood volume < 200ml
- 3.15.2 Remove blood volume – no less than 4L
- 3.15.3 Reservoir volume - >50ml
- 3.15.4 Red blood cell residual volume – no greater than 10ml
- 3.15.5 Return filter – particle removal of 200 microns
- 3.16 Installation

- 3.16.1 Installation, field assembly, interconnection, equipment calibration check-out and certifications shall be by factory trained personnel
- 3.16.2 Successful vendor must provide a complete installation schedule identifying the date of equipment delivery and install and the planned completion date not to exceed 28 working days after delivery.
- 3.16.3 One set of Owner's and Operator's manuals (in English) shall be provided and one set of installation manuals/plans (in English).
- 3.16.4 All service documentation will be provided to include service manuals, troubleshooting guides, schematics, and system block diagrams on all equipment under the bid. This includes equipment not manufactured by the successful bidder.

3.17 Service Support

Service shall be readily available to LSUHSC-S. Bidder guarantees that service response shall occur in less than 1.0 hour by phone and less than 24 hours on-site during normal business hours (8-5 M-F).

3.18 Application Support

- 3.18.1 Applications training for all components of the bid shall be included as part of the bid.
- 3.18.2 Vendor to specify exact training provided, and as minimum must meet the criteria as follows:
  - Must be provided on-site by qualified personnel with specific training on the specific version of the equipment installed.
  - Must be provided for a period of at least three (3) days at turnover of equipment.
- 3.18.3 Actual support shall be available through a 1-800 (toll free to user) support system at least 5 days a week.
- 3.18.4 Actual dates and hours of training shall be agreed upon by LSUHSC-S. (The intent of this statement is to give the owner/user department input to the dates and time of training in order to co-ordinate training with on-going staffing issues and patient care demands at LSUHSC-S)

3.19 System Warranty

Entire system shall be warranted for a period of one year. Warranty service shall be provided during normal working hours, 8:00 A.M. to 5:00 P.M., Monday through Friday. Entire system means the system in its entirety. All labor and components are to be included. This requirement pertains to all components included in this bid. During the warranty period, vendor shall provide LSUHSC-

S with all software upgrades that do not require hardware changes, at no charge. This requirement pertains to the complete system and all components included in this bid.

Preventative Maintenance Inspections (PMIs) are to be included at no charge to LSUSHC-S. Each PMI is to include all equipment. Preventative Maintenance Inspections are to be scheduled with LSUSHC-S during the normal working hours of the vendor to prevent additional after hour charges.